What's New In SCRs

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Summary

Many factors will impact the next generation of SCRs that will be built in the US. SCRs in the CAIR region will begin operating on a 12 month a year basis. This will also impact the design and operating cost of these newer units. Many other factors will have to be considered in the designs of new SCRs such as:

- Retrofits will have to be made on older units they may be more difficult to construct
- Smaller or high heat release units will require NOx control but may not justify the cost of a full size SCR.
- Based on the value of allowances NOx reductions greater than 90% may be required
- SO₃ generation from SCRs will have to be controlled
- What impact will SCRs have on mercury emissions

This paper will discuss the challenges faced by utilities and technology vendors such as Babcock Power Environmental and Riley Power to develop hybrid or new technologies to meet these new demands. In addition the authors will discuss the impact of twelve-month operations on existing units and the impacts of fuel flexibility related to poisoning of catalyst and catalyst management.